

92F/5E

REPORT ON THE GEOLOGICAL

MAPPING OF PART OF THE EAGLE GROUP OF CLAIMS

LOCATION: 5 miles south of Buttle Lake in the vicinity of  
Sugar, Shaker and Cream Lakes, Central Vancouver Island.  
Latitude 49° 30' Longitude 125° 00'

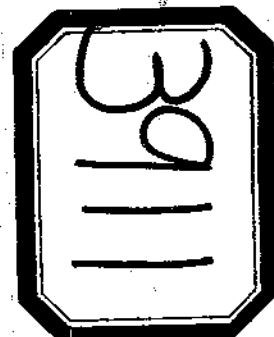
REPORT BY: G. H. Scott B.Sc., M.A.

SUPERVISED BY: B. E. Spencer B.A.Sc., P. Eng.

WORK PERFORMED BY: WESTERN MINES LIMITED as agent for Cream Silver Mines  
Limited.

WORK PERIOD: August 13 - 15, 1972  
August 20 - 25, 1972

September 12, 1972



3911

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Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3911 MAP

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MAP:

#1 Geology and claim map. Scale 1" = 1000'.

## INTRODUCTION.

Western Mines Limited holds under option agreement with Cream Silver Mines Limited 180 contiguous mineral claims in the vicinity of Price Creek, Bedwell Lake and Cream Lake, Central Vancouver Island, B. C.

Geological mapping was carried out during the periods August 13 - 15, 1972, and August 20 - 25, 1972, on the Eagle claim group of 22 claims. This work was performed in order to evaluate the mineral potential of the upper Sicker Group of volcanic rocks.

## LOCATION AND ACCESS.

The southern boundary of the Eagle group passes through Sugar and Cream Lakes and includes Shaker Lake. Access is obtained by a good walking trail up Price Creek or by float-plane to Bedwell Lake, thence a trail up to the claim group. The crews carrying out the present mapping utilized two camps in the claim group, both of which were supplied by helicopter.

Typical alpine vegetation covers all of the claim group and rock exposure is excellent.

## GEOLOGY.

### i) Structure

Both folding and faulting have affected the rock types in the area. Folding is most extreme to the west of Sugar Lake, where a recumbent anticline, overturned toward the east, must be invoked to explain the structural attitudes and stratigraphy encountered. The axial plane of this fold strikes almost due north and dips to the west at about  $80^{\circ}$ . Strong shearing of the same attitude affects all the rock types west of Sugar Lake.

Away from this zone of folding, the succession has a uniform strike of 30° - 45° with dips to the southeast averaging 45°.

Two faults are found within the claim group, both of the normal type. One runs 10° east of north along the western shore of Cream Lake, the other extends westward from Shaker Lake.

ii) Lithologies.

a) Sicker Group

The presence of distinctive marker horizon, termed the cherty bedded tuff horizon, enabled the folded succession to be worked out. Other, coarser-grained pyroclastic units change facies laterally, thereby making correlation difficult. The Sicker Group rocks which were the oldest encountered in the claim group, can be divided into the following groups:

(Youngest)	Biomicrite limestones	800'
	Dacite agglomerates and dacite lapilli tuffe	800'
	Cherty bedded tuff	300'
(Oldest)	Dacite lapilli tuff	1000'

Dacite lapilli tuff

Fragments of rhyolite, dacite, and porphyritic andesite, ranging in size from 2 mm. to 15 mm. are found in a chloritized dacite matrix. The fragments normally constitute at least 70% of the rock total.

Cherty bedded tuff

This unit consists of very thinly bedded cream, light gray to purple aphanitic cherty tuff. No fragments are visible even under a hand-lens. Common hair-line fractures are filled by calcite, quartz,

and occasionally pyrite. Cross-bedding is sometimes found and was used to determine if the tuffs had been overturned.

#### Dacite agglomerates and dacite lapilli tuffs

These are grouped together since they only differ with respect to the size of the pyroclastic fragments, the arbitrary size limit for a lapilli tuff being 15 mm. Fragments in the agglomerate ranged up to 15 cm. in long dimension, and fragments of this size commonly constituted up to 60% of the rock total. The most common fragments were of porphyritic andesite and aphanitic medium grey rhyolite. The matrix to such an agglomerate was essentially the same as the dacite lapilli tuff.

Thin beds of dacite lithic tuff often showed good graded bedding and could thus be used to determine which way up the sequence was laying.

#### Biomicrite Limestones

A cessation of volcanic activity was followed by the establishment of warm, shallow, shelf-sea conditions. Coralline and crinoidal limestones plus micrite and ribbon cherts are commonly interbedded giving outcrops a thinly bedded appearance.

The outlier of limestone between Cream and Shaker Lakes represents the upper 200' of the carbonate sequence and has been repeated by faulting.

#### b) Triassic Volcanics

Volcanic flows of the Karmutsen Group were exposed on the claim group. The lowermost units were thinly bedded rhyolites and andesites; pillow lavas, the

typical rock-type of the group was only occasionally observed, being higher in the sequence.

c) Intrusive Rocks

All the lithologies of the Sicker Group and the Karmutsen Group are characteristically intruded by dykes of feldspar porphyry associated with the "Bedwell Batholith" of granodiorite composition some 0.5 mile south of the claim group. The most common phase of this intrusive is a porphyritic microgranodiorite in which idiomorphic plagioclase crystals, and rounded quartz phenocrysts are found in a light grey, sometimes aphanitic dacitic groundmass.

iii) Mineralization.

No mineralization of economic significance was encountered within the claim group. Disseminated pyrite was not uncommon in some of the sheared cherty bedded tuffs and in some dacite lapilli tuffs.

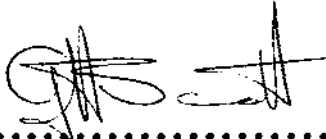
iv) Geological Interpretation.

The Sicker Group probably represents part of an island arc volcanic sequence in which explosive activity of a dacitic nature was most common. A cessation of activity allowed the subaqueous accumulation of approximately 300' of fine-grained cherty tuffs before another cycle of explosive activity began.


Shelf-sea, near-shore tropical conditions became established in late Carboniferous - early Permian times, and up to 800' of carbonates accumulated, indicating that little or no terrigenous detritus was being brought into the sea.

The overlying sequence of rhyolite to andesite to pillow lava probably represents the gradual deepening of an orogenic trough over an oceanic crust.

During Jurassic-Cretaceous time, all the older rocks were forcefully intruded by dykes associated with the granodioritic "Bedwell Batholith."

REPORT BY  .....

G. H. Scott B.Sc., M.A.

SUPERVISED BY  .....

B. E. Spencer B.A.Sc., P. Eng.



EXPENDITURES.

Geologists

G. H. Scott	@ \$40/day	Aug. 13 - 15, 1972	\$ 120.00
G. H. Scott	@ \$40/day	Aug. 20 - 25, 1972	240.00
G. Cooper	@ \$41/day	Aug. 13 - 15, 1972	123.00
G. Cooper	@ \$41/day	Aug. 20 - 25, 1972	246.00

Field Assistants

P. J. Mason	@ \$28/day	Aug. 13 - 15, 1972	84.00
P. J. Mason	@ \$28/day	Aug. 20 - 25, 1972	168.00
R. Gardner	@ \$23/day	Aug. 13 - 15, 1972	69.00
R. Gardner	@ \$23/day	Aug. 20 - 25, 1972	138.00

Living Expenses

36 Man-days	@ \$8.00 per day		288.00
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Mobilization

9 days	@ \$15 per day		135.00
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Helicopter

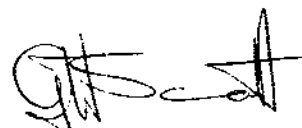
5 hours	@ \$253 per hour		1,265.00
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Report and Draughting

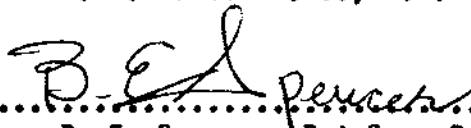
G. H. Scott, September 8, 9, 1972			80.00
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Total Expenditure.

\$2,956.00

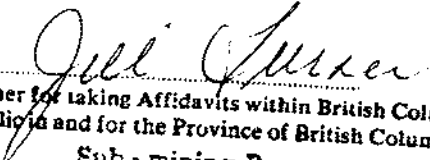
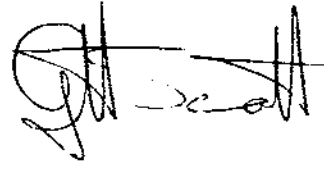


.....  
G. H. Scott B.Sc., M.A.



.....  
B. E. Spencer B.A.Sc., P. Eng.

Declared before me at the *City*  
of *Vancouver*, in the  
Province of British Columbia, this *19*  
day of *Sept.* *1972*, A.D.



A Commissioner for taking Affidavits within British Columbia or  
A Notary Public and for the Province of British Columbia.

Sub-mining Recorder

APPENDIX.

Eagle Claim Group

<u>Claim</u>	<u>Record</u>
Bear 2	10353
Bear 4-9	10355 - 10360
Bear 21-24	10372 - 10375
Cream 4	9419
Cream 15-18	11574 - 11577
Cream 1E-6E	11570 - 11573

STATEMENT OF QUALIFICATIONS.

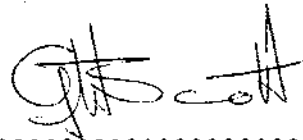
Graham H. Scott  
#4, 1377 W. 70 Avenue  
Vancouver 14, B. C.

1. I am a graduate of King's College, University of London.  
(B.Sc. Special 1968)

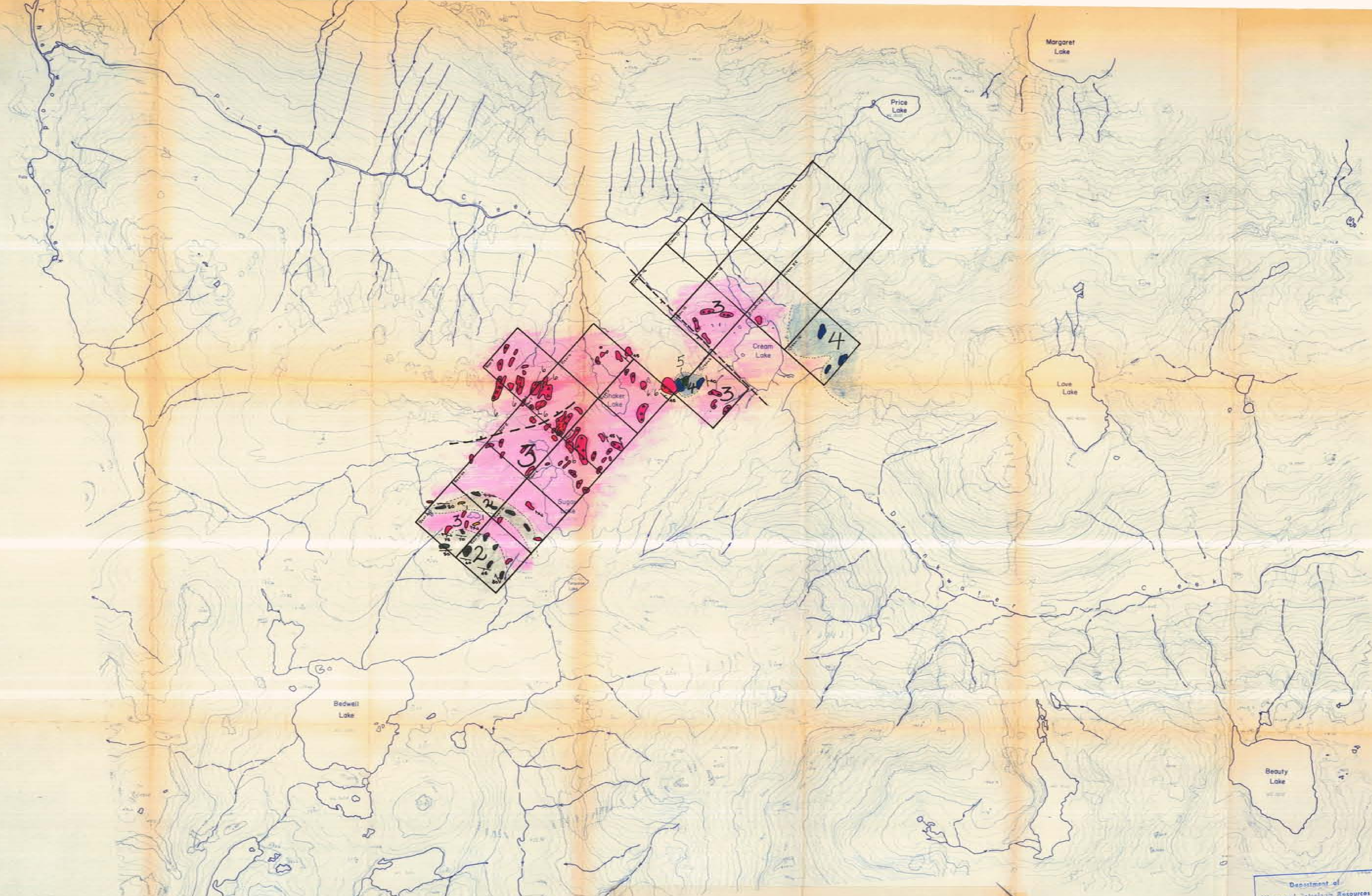
I am a graduate of State University of New York at Buffalo.  
(M.A. 1970)

2. I have practiced my profession with Northgate Exploration Limited,  
Toronto, and Western Mines of Campbell River over the last two years.

3. I am and have been for the past five months employed as an Exploration  
Geologist with Western Mines Limited.

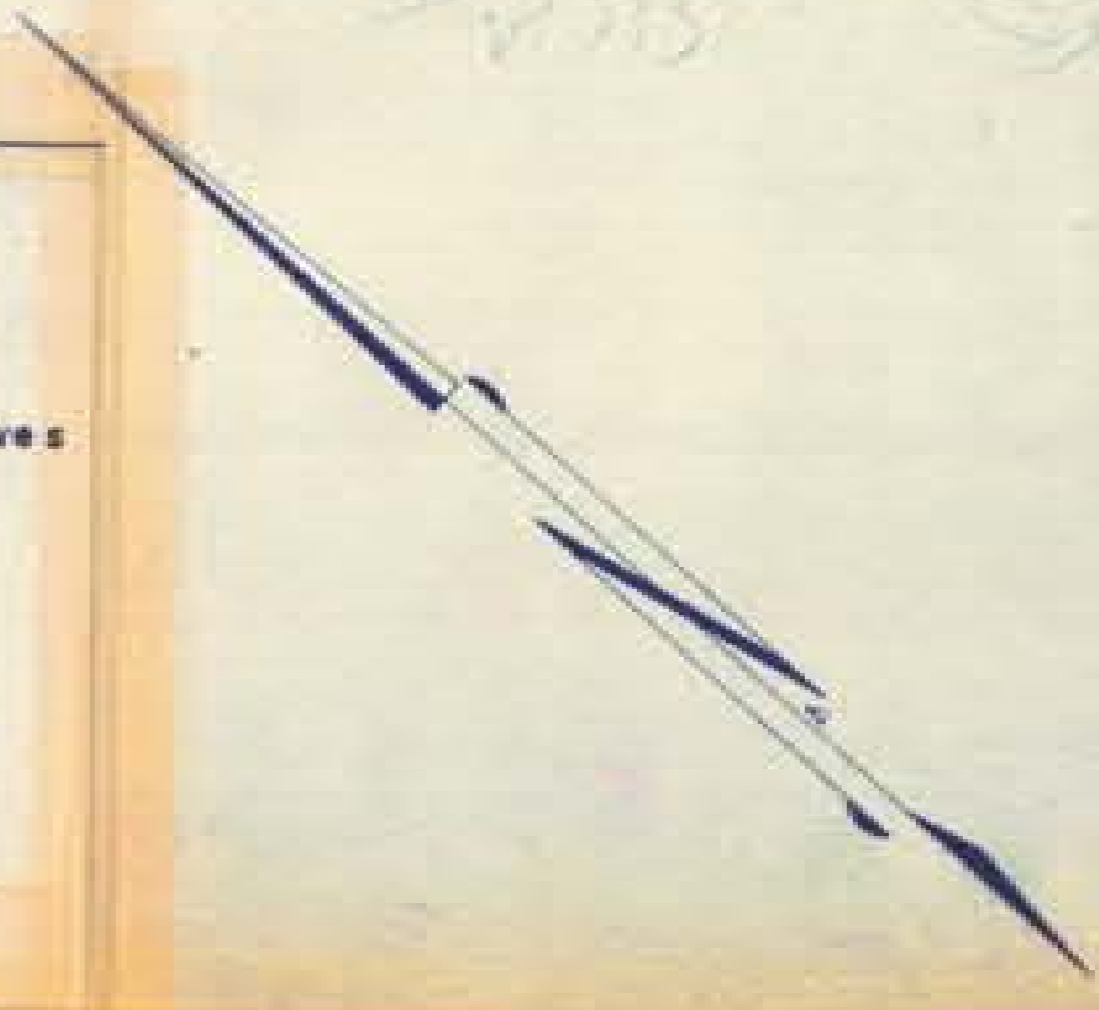


.....  
G. H. Scott, B.Sc., M.A.



### LEGEND

	Geologic contact (observed, inferred)		Diabase (not represented)
	Inferred fault (downfault side marked)		Granodiorite & related intrusives
	Outcrop		Karmutsen volcanics
	Attitude (dip in degrees, vertical) " not overturned.		Limestones
	Foliation (dip in degrees, vertical)		Dacite agglomerate
	Claim name		Dacite lithic & lapilli tuffs
			Cherty bedded tuff
			Rhyolite



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3911 MAP #1

To accompany original report by Graham W. Galt  
M.S., M.A., P. Eng., Geol. Eng., Dip. A.C., 1968  
in October 1972

SCALE AND REVISIONS: SCALE BASED ON LIMITED GEODAT CONTROL  
MEASURED IN 1968; REVISIONS NOT INDICATED UNLESS SHOWN  
COMPILED FROM AERIAL PHOTOGRAPHS AT AN APPROPRIATE SCALE  
OF 1 INCH EQUALS 2500 FEET ALIGNED IN 1962

**Western Mines Ltd.**  
**Bedwell Lake Area**

PRELIMINARY RECONNAISSANCE TYPE MAPPING

Compiled by  
McBRANNEN SURVEYING & ENGINEERING LTD.  
220 West Pender St. Vancouver, B.C.

SHEET NO. 1 OF 1  
DATE: 1972